USDA Forest Service
U.S. DEPARTMENT OF AGRICULTURE

Upper Conasauga Implementation Area

Foothills Landscape Project

Chattahoochee-Oconee National Forest

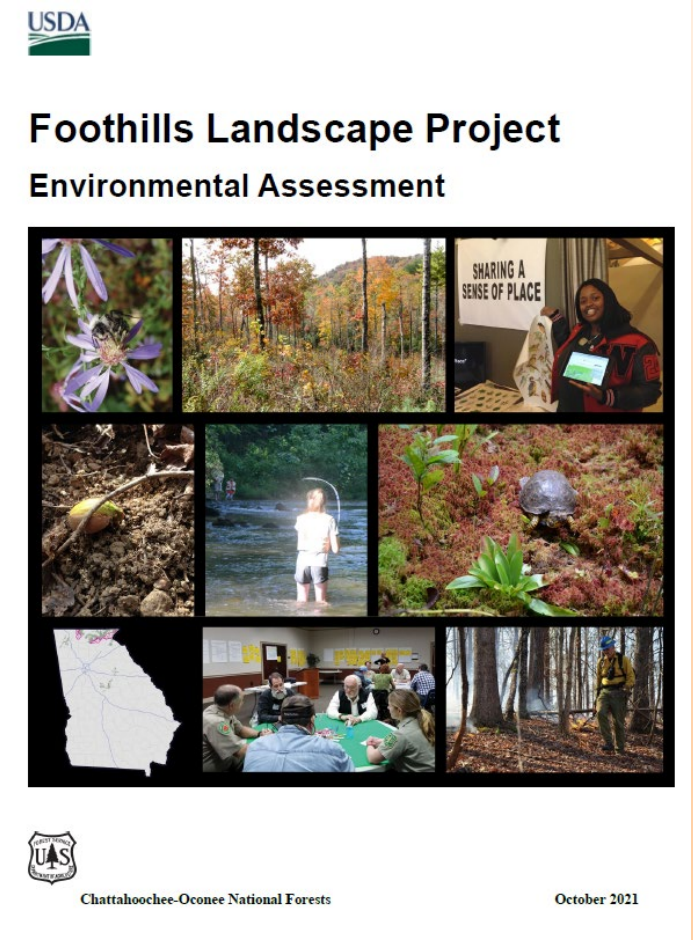
Moving from Programmatic to Site Specific Implementation

Interdisciplinary Team (IDT):

- Silviculturist, Wildlife Biologist, Fire Management Officer, Timber Manager, Recreation Manager, Engineering, Archaeologist, Soil Scientist

Upper Conasauga Implementation Area (IA)

- Directly east of the Mooneyham Implementation Area
- 8,449-acre project area

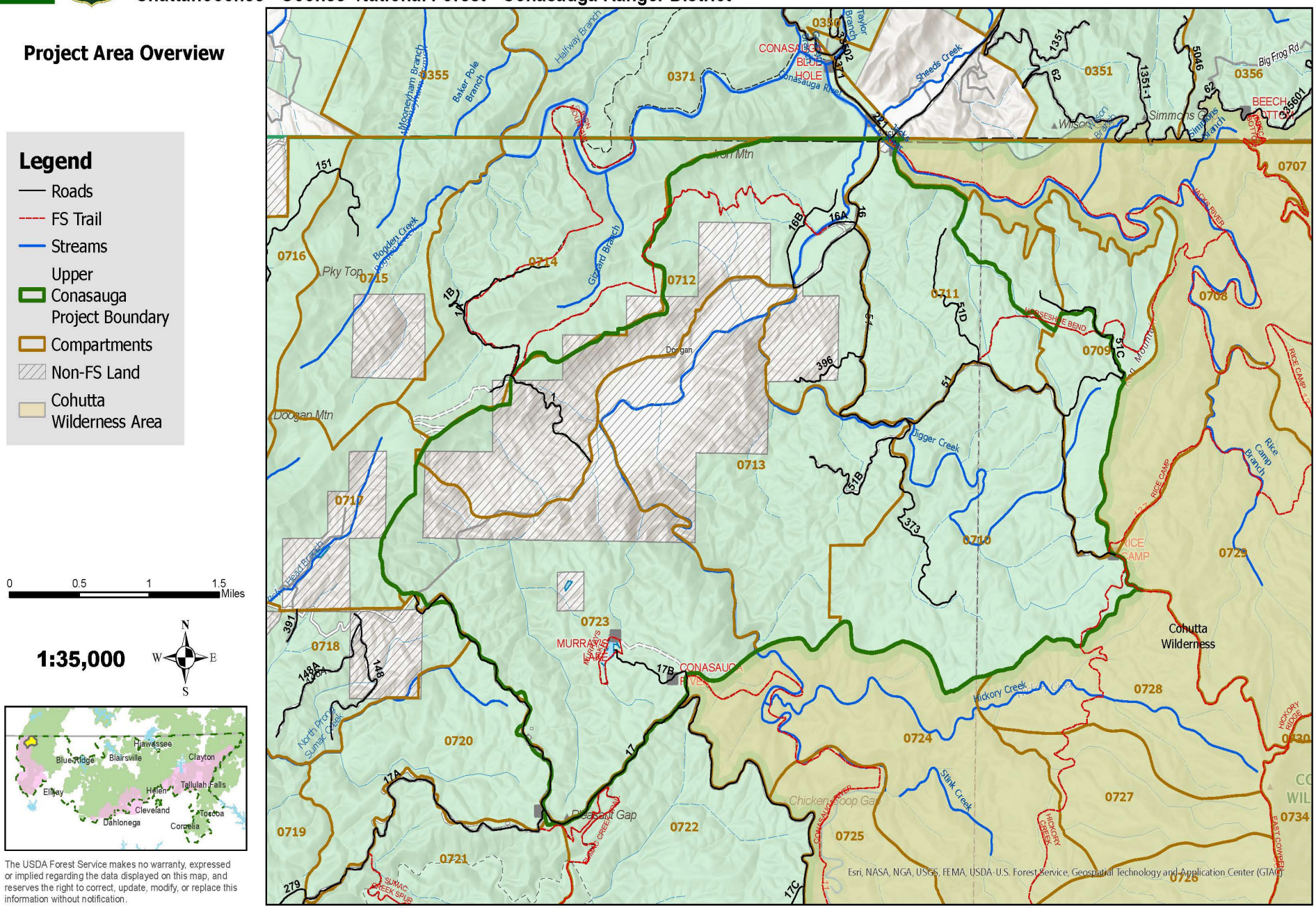


Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 10/9/2024

Project Area Overview



Activities Implementable from Foothills Decision Notice

- Canebrake restoration – **10 acres**
- Stream habitat improvements – **8.8 miles**
- Continuation of prescribed burning within existing burn blocks – **1,619 acres**
- Decommissioning of maintenance level (ML) 2 and ML 1 system roads – **0.4 miles**
- Decommission low-use trails – **0.8 miles**

Canebrake restoration – 10 acres

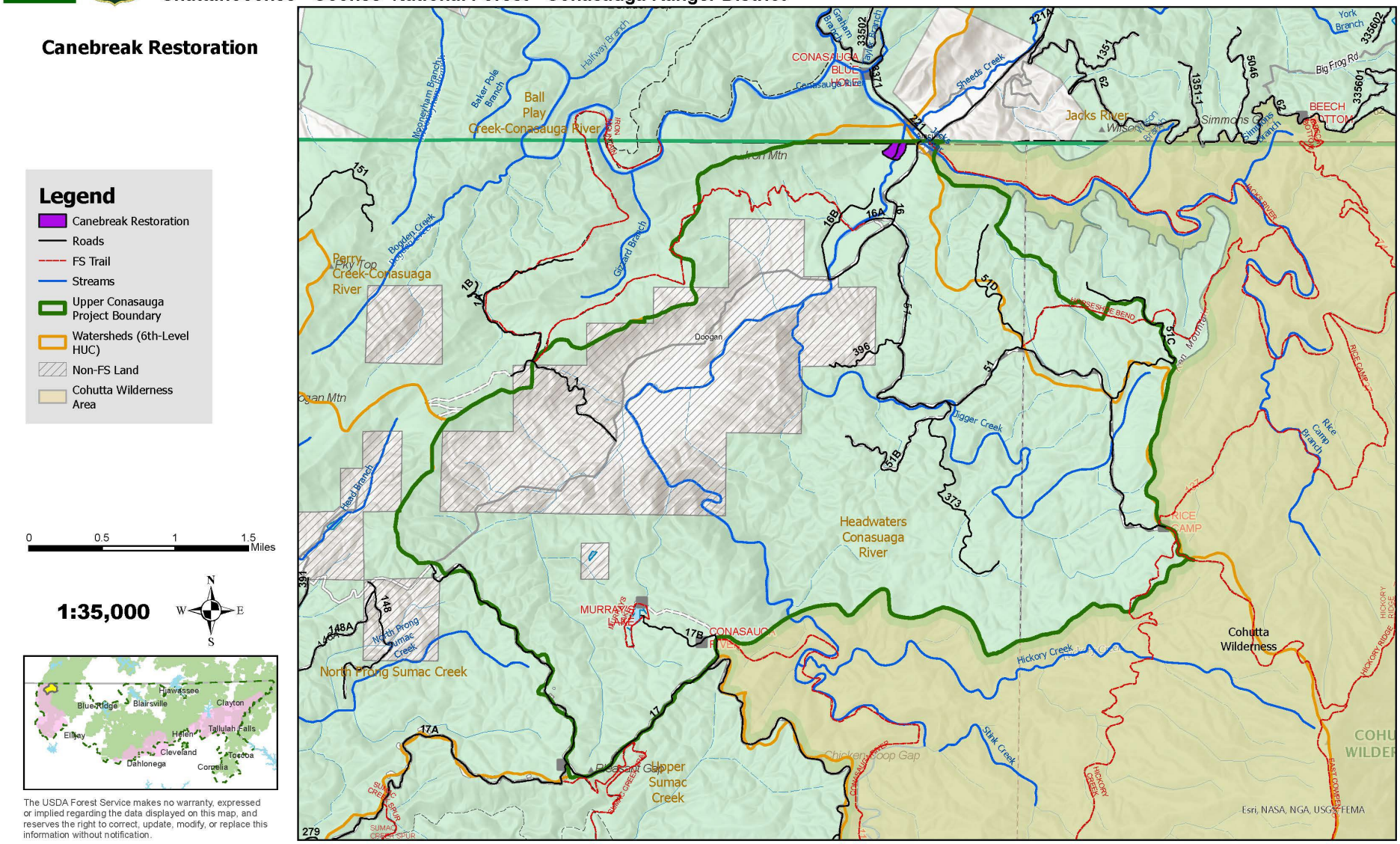
- In the Conasauga River floodplain at the TN-GA line (Alaculsy Valley)
- Some dense patches of rivercane, most is thinly scattered
- Proposed treatment involves getting sunlight to the existing cane by:
  - spraying NNIS competing with the cane,
  - hand-felling and cut-surface herbicide treatment of selected midstory and overstory trees,
  - mowing, mastication of competition in fields
  - monitoring results

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/5/2024

Canebreak Restoration



The USDA Forest Service makes no warranty, expressed or implied regarding the data displayed on this map, and reserves the right to correct, update, modify, or replace this information without notification.

Stream habitat improvements – 8.8 miles

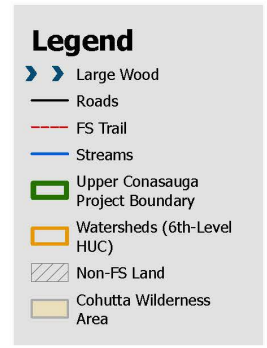
- Large wood surveys demonstrated a deficit of this resource, impairing hydrologic and biological processes
- Wood loading to six streams (8.8 miles) is proposed to increase structural complexity
- Trees would be hand felled with chainsaws (or utilizing dead and down) into or across the stream channel, using winches and tackle to move and position felled trees. In some locations, a farm tractor would be used.

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

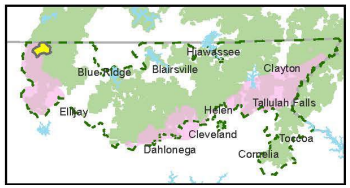
Map Creation Date: 9/3/2024

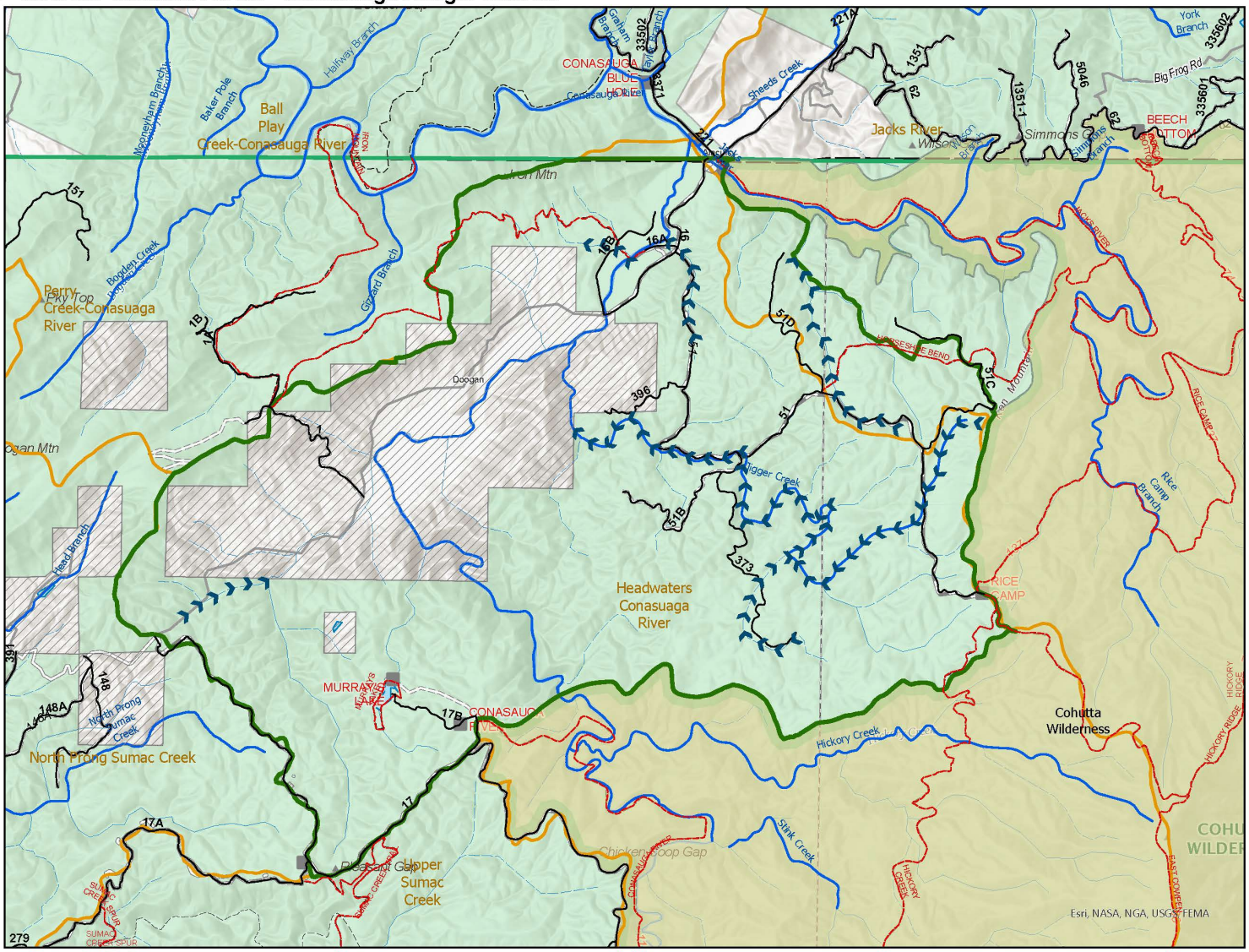
Stream Habitat Improvements - Add Large Wood to Stream Channels through Cut and Leave Operations (Mechanical & Non-mechanical)



0 0.5 1 1.5 Miles

1:35,000





Continuation of prescribed burning within existing burn blocks – 1,619 acres

Two existing burn units in the Upper Conasauga IA have received multiple prescribed fire treatments within the past 10+/- years.

Both have established control lines and have been previously burned on a 3-5-year rotation to restore fire after many decades in which all fire had been suppressed. The 2016 Rough Ridge wildfire was partially controlled due to these units.

- **Buffalo Rx:** Formerly called the Ten Time Burn, this unit is approximately 26 acres and has been burned on a 3-year rotation since 1988. All prescribed burns have been dormant season.

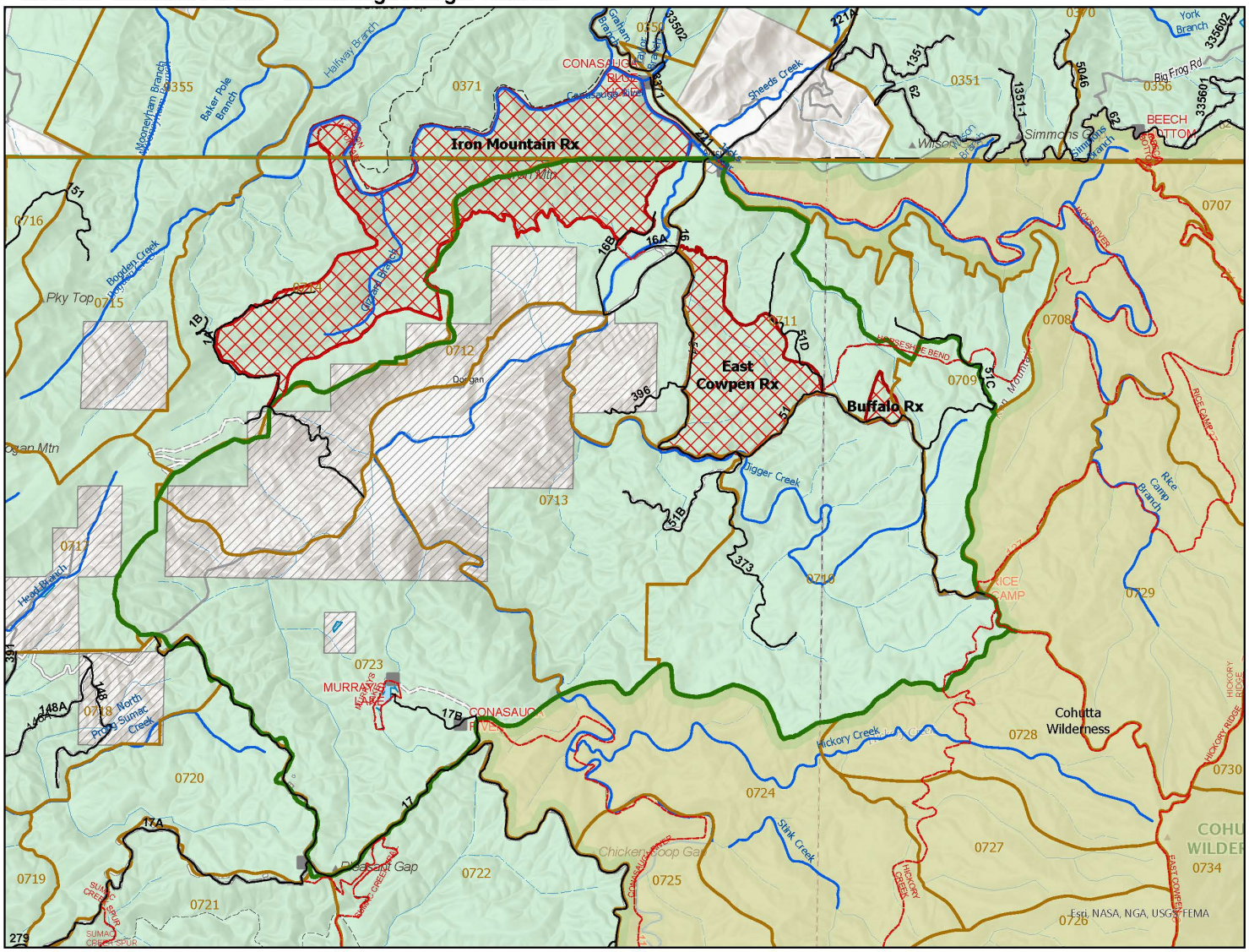
- **East Cowpen Rx:** This unit is approximately 422 acres and has been burned on a 3–4-year rotation since 2010. All prescribed burns have been dormant season.

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/5/2024

Continuation of Prescribed Burning within Existing Burn Blocks

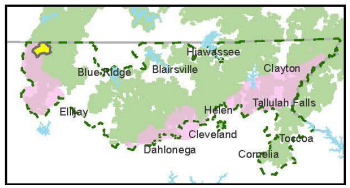


Legend

- Existing Burns
- Roads
- FS Trail
- Streams
- Upper Conasauga Project Boundary
- Compartments
- Non-FS Land
- Cohutta Wilderness Area

0 0.5 1 1.5 Miles

1:35,000



Decommissioning of maintenance level (ML) 2 and ML 1 system roads – 0.4 miles

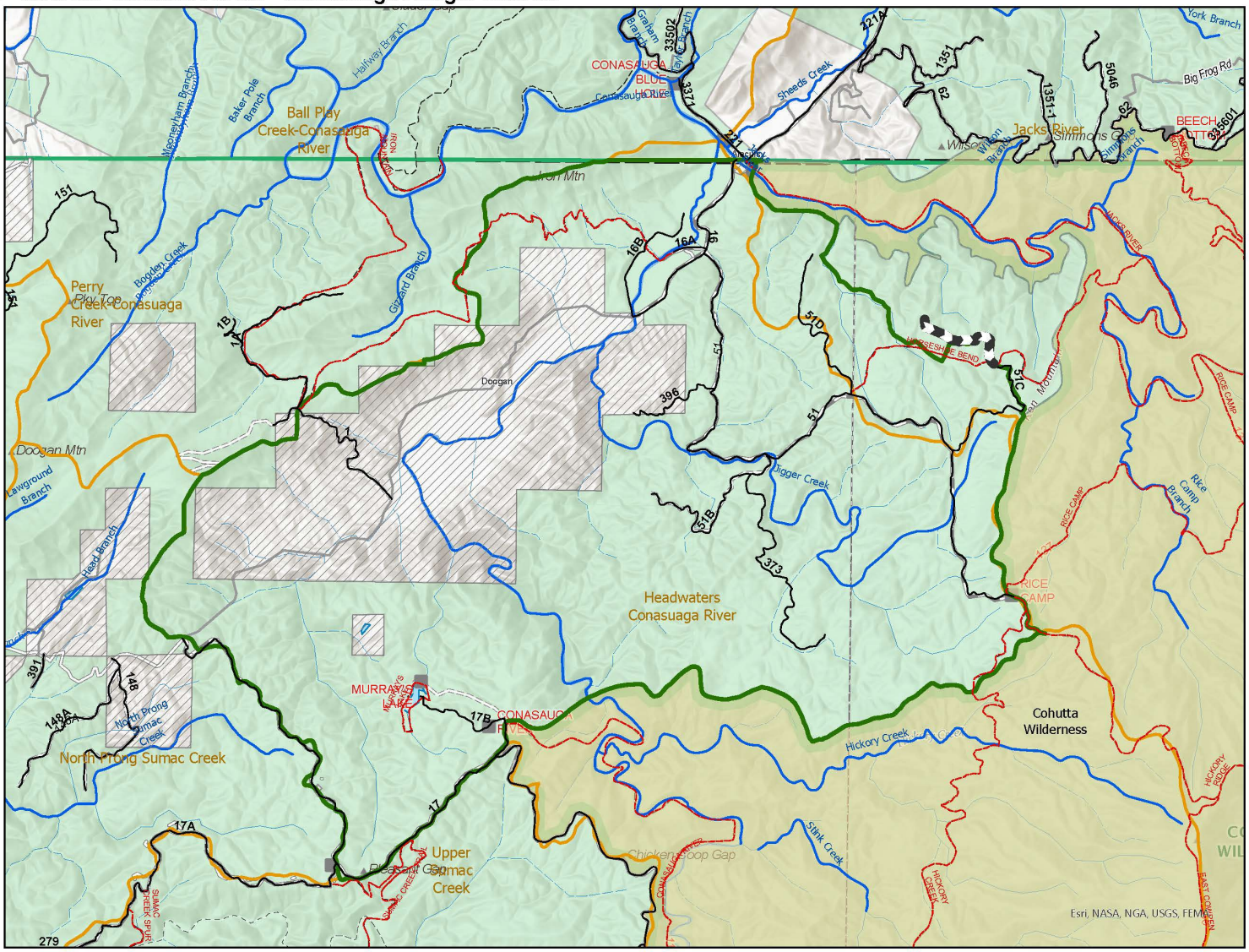
- The Forest Service does not have the capacity or funding to maintain all roads to their current MLs.
- Decommissioning will permanently close this portion of the road to all vehicle traffic. FSR 51C (Ken Mountain) from MP 1.4 to MP 1.8 is a maintenance level (ML) 2 road, closed year-round to the public, within the Recommended Ken Mountain Wilderness Study Area, and rarely used for administrative purposes.
- An earthen barrier would be constructed. Additional actions may include reshaping the roadbed to drain water by utilizing heavy equipment to construct waterbars, fill ditches, and outslope the roadbed.

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/5/2024

Decommissioning of Maintenance Level (ML) 2 and ML 1 System Roads - FSR 51C Ken Mountain RD

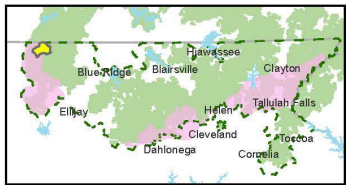


Legend

- FSR 51C (Ken Mountain RD)
- Roads
- FS Trail
- Streams
- Upper Conasauga Project Boundary
- Watersheds (6th-Level HUC)
- Non-FS Land
- Cohutta Wilderness Area

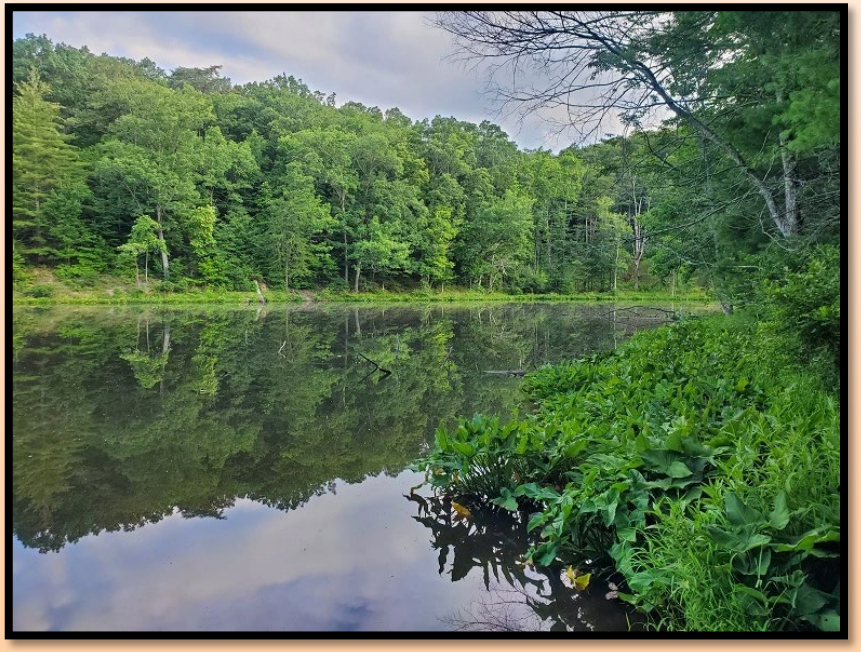
0 0.5 1 1.5 Miles

1:35,000



Decommissioning low use trails:
Murray’s Lake Trail (#182) - **0.8 miles**

- The Forest Service does not have the capacity or funding to maintain all the trails on the system and no volunteer group has expressed interest in maintaining the Murray’s Lake Trail.
- Murray's Lake Trail (Trail #182) is an 0.8 mile-long hiking trail on the trail system that is low use and not maintained. It is a narrow foot path primarily used by anglers.
- There would be no change in access for users; just an administrative removal of the trail from the system and updating of maps. The trail would not be physically blocked or obliterated.

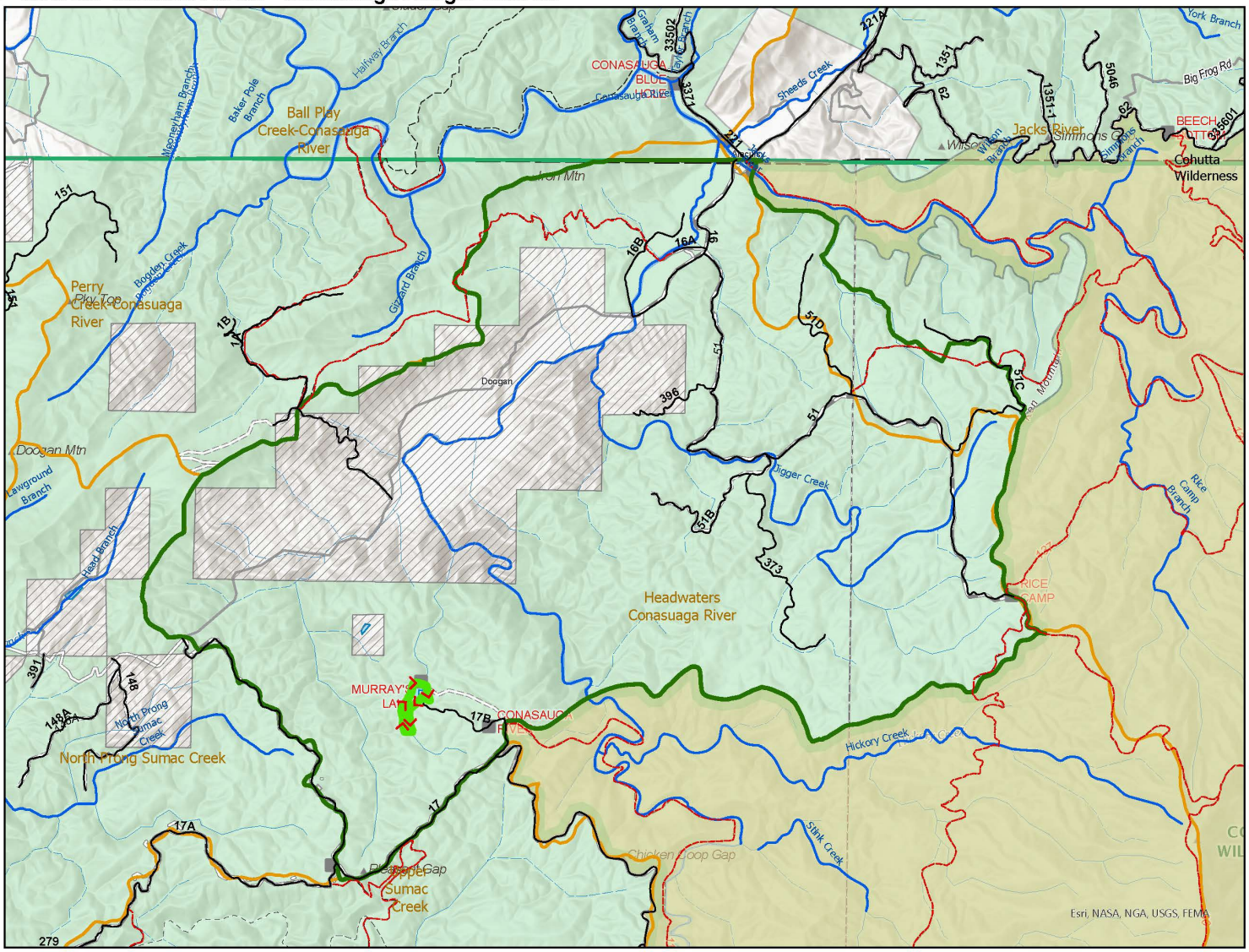


Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/5/2024

Decommission Low-use Trails - Murray's Lake Trail (Trail 182)



Upper Conasauga IA Commercial Activities

- Restoration of southern yellow pine forest on dry sites dominated by mid to late-successional Virginia or white pine: *Two-aged regeneration harvest* – **251 acres**
- Restoration of southern yellow pine forest or oak forest on sites currently occupied by off-site plantations (loblolly or white pine) or failed shortleaf or pitch pine plantations
  - *Two-aged regeneration harvest*: Restore shortleaf pine - **222 acres**
  - *Two-aged regeneration harvest*: Restore oak – **52 acres**
  - *Commercial thinning*: Restore oak – **82 acres**
- Commercial thinning of pine plantations to improve forest health: *Commercial thinning* - **690 acres**
- Maintenance of southern yellow pine forest: *Commercial thinning* – **47 acres**
- Maintenance of oak forest: *Commercial thinning* – **206 acres**

Upper Conasauga IA Commercial Activities

- Maintenance of oak forest:
  Expanding gap treatment – **95 acres**
- Canopy gap creation in closed-canopied mesic stands:
  Commercial thinning – **34 acres**
- Restoring open woodland habitats on appropriate sites:
  Commercial thinning – **22 acres**
- Create young forest (ESH) by daylighting roads and permanent openings: *Two-aged regeneration harvest*
  - **24 acres** of road daylighting
  - **10 acres** of wildlife opening daylighting
- Create or expand permanent openings:
  Commercial thinning – **10 acres**

Restoration of southern yellow pine forest on dry sites dominated by mid to late-successional Virginia or white pine:
Two-aged regeneration harvest **- 251 acres**

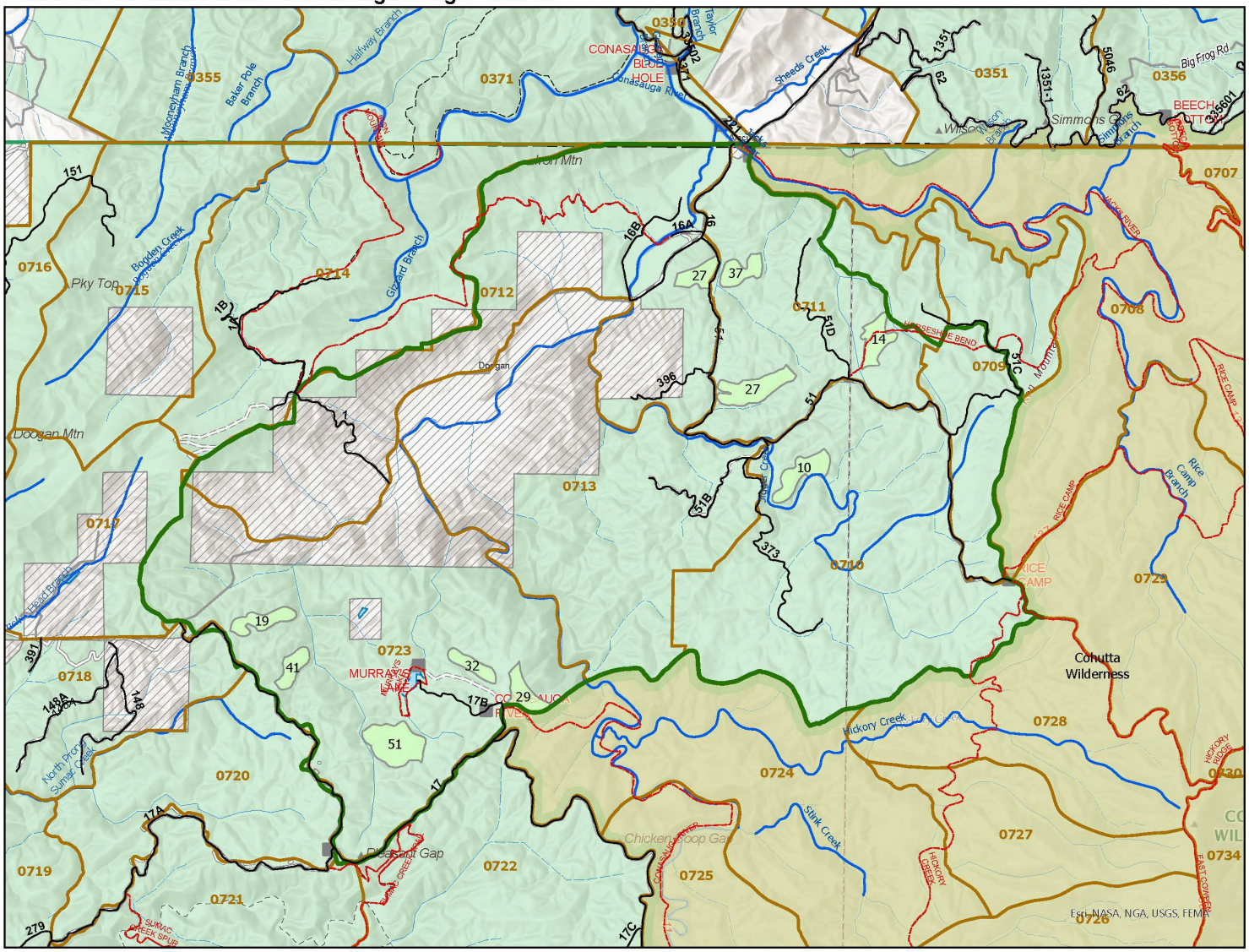
- A century of fire suppression has resulted in the establishment of more than 21,000 acres of Virginia and/or white pine on dry sites ecologically suitable for fire-dependent shortleaf pine.
- Restoring shortleaf to appropriate places on the landscape will create young forest and increase the resiliency of these stands to natural disturbance
- Two-aged regeneration harvest, site prep, release, precommercial thinning
- 10 stands

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/20/2024

Restoration of Southern Yellow Pine Forest on Dry Sites Dominated by Mid to Late-successional Virginia or White Pine: Two-aged Regeneration Harvest-Shortleaf Restoration



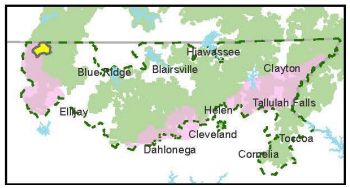
Legend

- Restoration of SYP Forest - Virginia/White Pine
- Roads
- FS Trail
- Streams
- Upper Conasauga Project Boundary
- Compartments
- Non-FS Land
- Cohutta Wilderness Area

0 0.5 1 1.5 Miles

1:35,000

N W E S



Restoration of southern yellow pine forest or oak forest on sites currently occupied by off-site plantations (loblolly or white pine) or failed shortleaf or pitch pine plantations:
Two-aged regeneration harvest to restore shortleaf pine **- 222 acres**

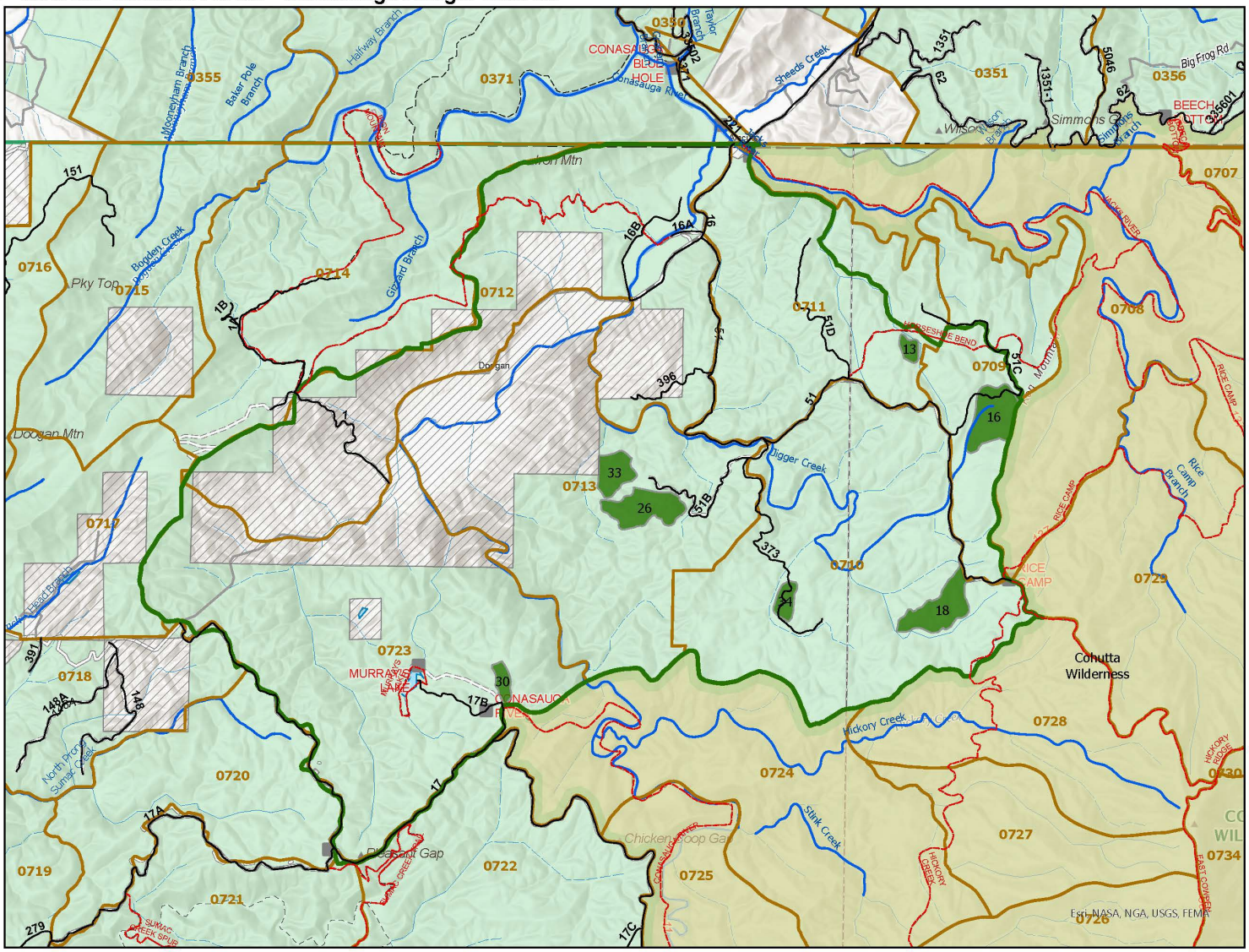
- Previous management in the Foothills project area resulted in establishment of over 11,000 acres of off-site pine plantations of white pine or loblolly where regeneration to shortleaf pine is desired.
- Restoring shortleaf to appropriate places on the landscape will create young forest and increase the resiliency of these stands to natural disturbance.
- Two-aged regeneration harvest, site prep, release, precommercial thinning
- Seven stands

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/20/2024

Restoration of Southern Yellow Pine Forest or Oak Forest on Sites Currently Occupied by Off-site Pine Plantations (Loblolly or White Pine) or Failed Shortleaf Plantations: Two-aged Regeneration Harvest - Shortleaf Restoration

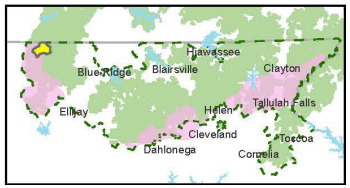


Legend

- Restoration of SYP Forest - Offsite Plantations
- Roads
- FS Trail
- Streams
- Upper Conasauga Project Boundary
- Compartments
- Non-FS Land
- Cohutta Wilderness Area

0 0.5 1 1.5 Miles

1:35,000



Restoration of southern yellow pine forest or oak forest on sites currently occupied by off-site plantations (loblolly or white pine) or failed shortleaf or pitch pine plantations:
Two-aged regeneration harvest to restore oak **- 52 acres**

- Previous management in the Foothills project area resulted in establishment of over 11,000 acres of off-site pine plantations of white pine or loblolly. Some of these plantations exist on sites more ecologically appropriate for oak or mixed oak-pine forest.

- On sites where natural regenerating oak seedlings are abundant in the understory of off-site plantations.

- Two-aged regeneration harvest, site prep, release, supplemental planting

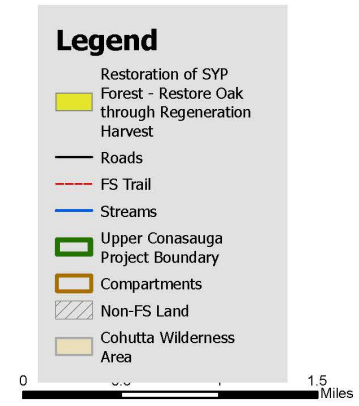
- Two stands

Upper Conasauga Implementation Area - Foothills Landscape Project

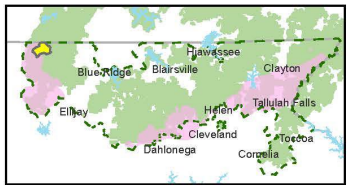
Chattahoochee - Oconee National Forest - Conasauga Ranger District

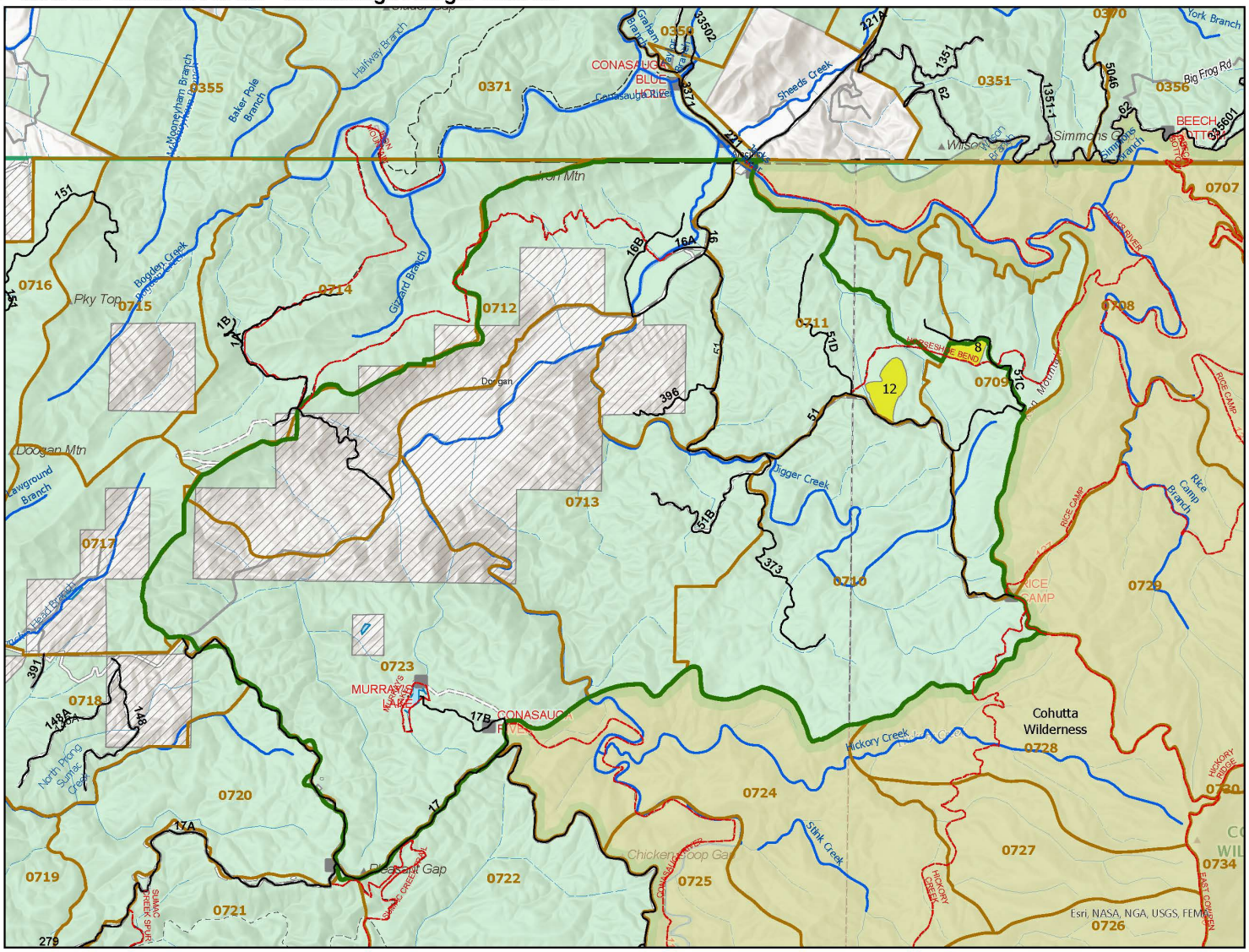
Map Creation Date: 9/5/2024

Restoration of Southern Yellow Pine Forest or Oak Forest on Sites Currently Occupied by Off-site Pine Plantations (Loblolly or White Pine) or Failed Shortleaf Plantations: Two-aged Regeneration Harvest - Restore Oak



1:35,000





Restoration of southern yellow pine forest or oak forest on sites currently occupied by off-site plantations (loblolly or white pine) or failed shortleaf or pitch pine plantations:
Commercial thinning to restore oak **- 82 acres**

- Previous management in the Foothills project area resulted in establishment of over 11,000 acres of off-site pine plantations of white pine or loblolly. Some of these plantations exist on sites more ecologically appropriate for oak or mixed oak-pine forest.

- When oak is adequate in the overstory (canopy), intermediate thinning of off-site pine to a residual basal area of 40 – 70 ft^2/ac.

- This would not result in the creation of young forest habitat, but simply a change in forest-typing (from pine dominated to oak dominated).

- Three stands

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/5/2024

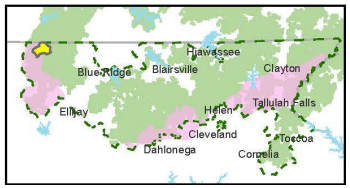
Restoration of Southern Yellow Pine Forest or Oak Forest on Sites Currently Occupied by Off-site Pine Plantations (Loblolly or White Pine) or Failed Shortleaf Plantations:
Commercial Thinning - Restore Oak

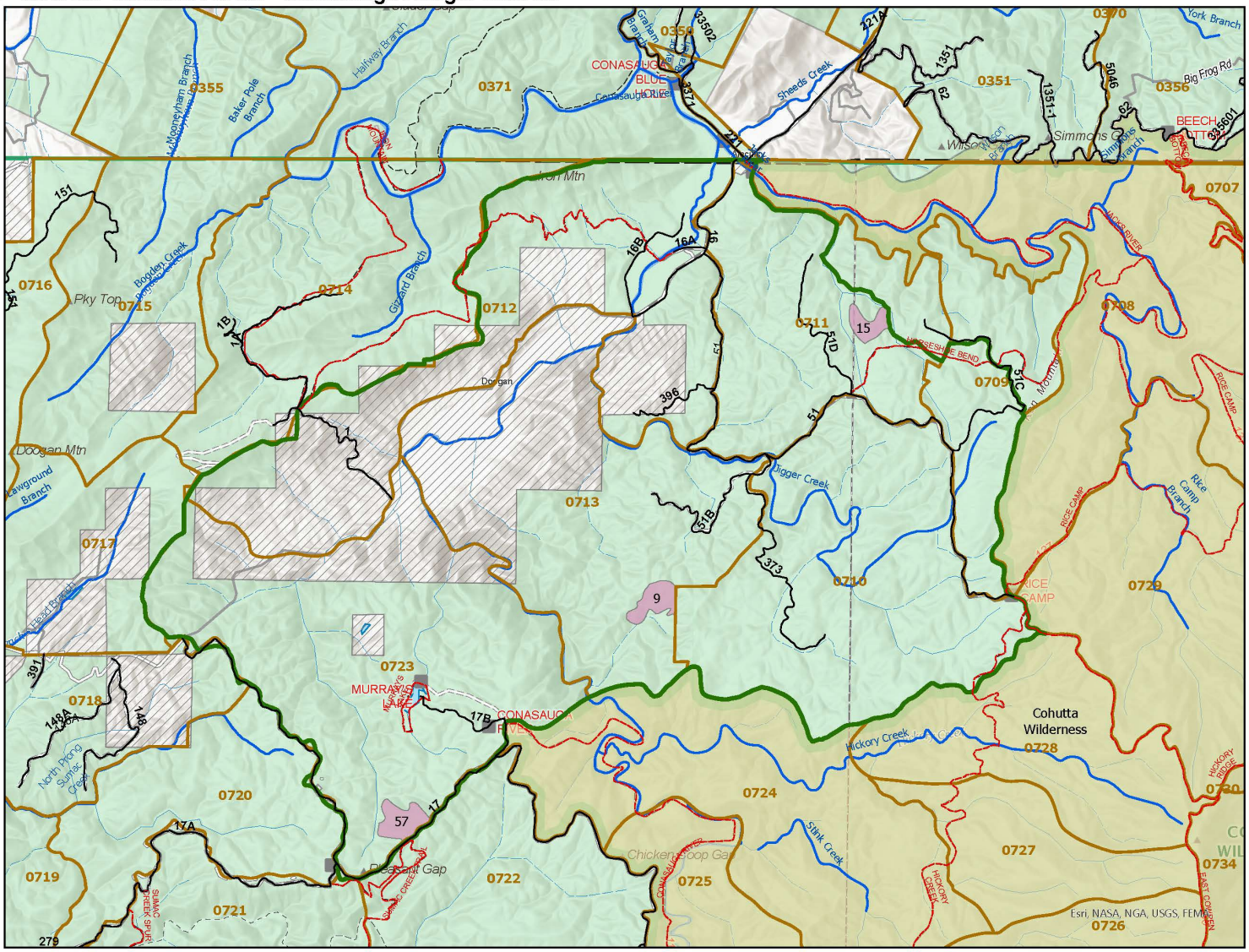
Legend

- Restoration of SYP Forest - Restore Oak through Commercial Thinning
- Roads
- FS Trail
- Streams
- Upper Conasauga Project Boundary
- Compartments
- Non-FS Land
- Cohutta Wilderness Area

0 0.5 1 1.5 Miles

1:35,000





Commercial thinning of pine plantations to improve forest health: 690 acres

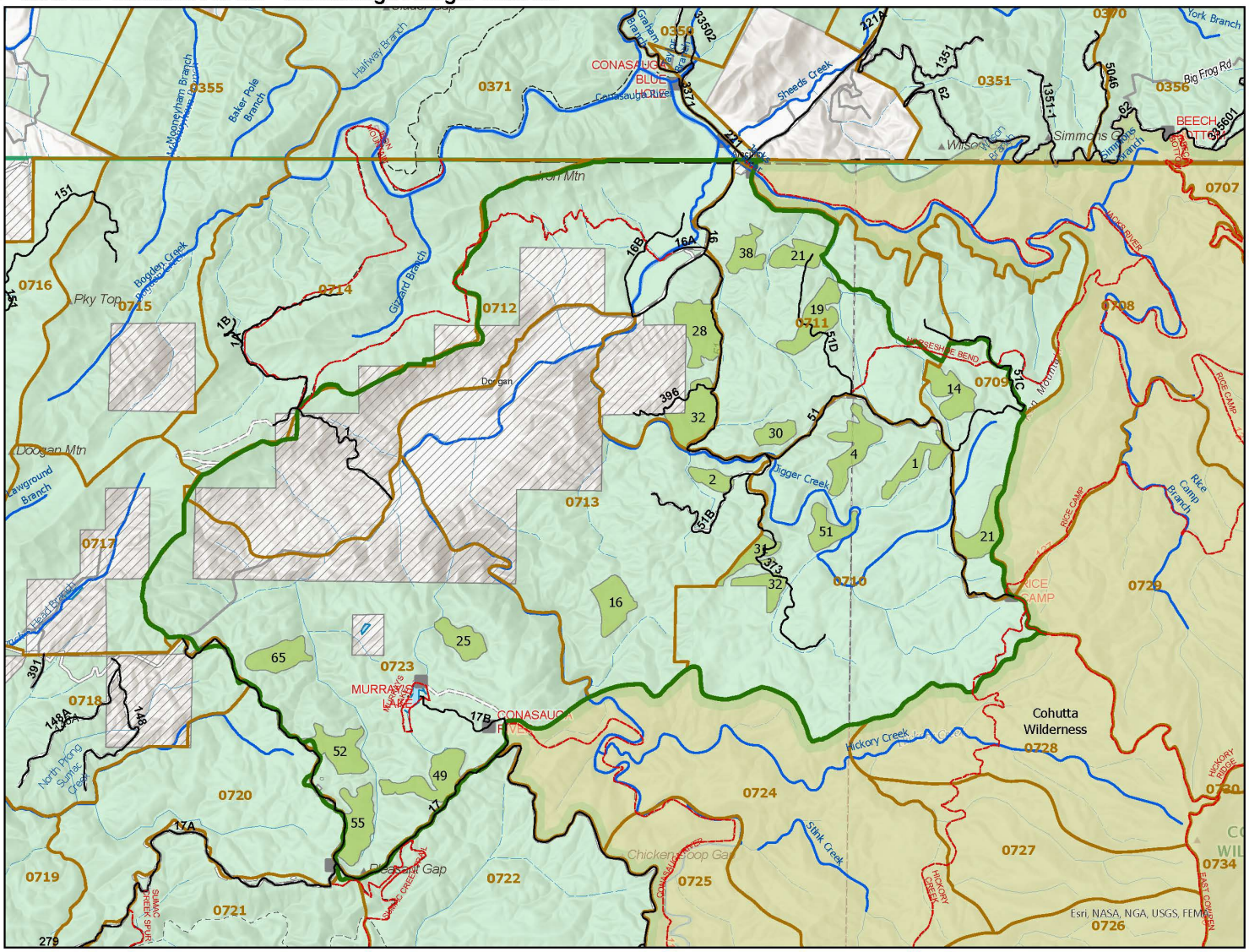
- Within the Foothills Project area, there are nearly 25,000 acres of immature pine plantations highly vulnerable to pine bark beetle infestations due to overstocked stand conditions (Basal Areas > 120 ft^2/ac).
- These pine plantations are proposed for commercial thinning to reduce the risk for bark beetle infestations. Thinning would reduce the basal area to less than 80 ft^2/ac.
- 20 stands

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/5/2024

Commercial Thinning of Pine Plantations to Improve Forest Health:
Commercial Thinning



The USDA Forest Service makes no warranty, expressed or implied regarding the data displayed on this map, and reserves the right to correct, update, modify, or replace this information without notification.

Maintenance of southern yellow pine forest: Commercial thinning – **47 acres**

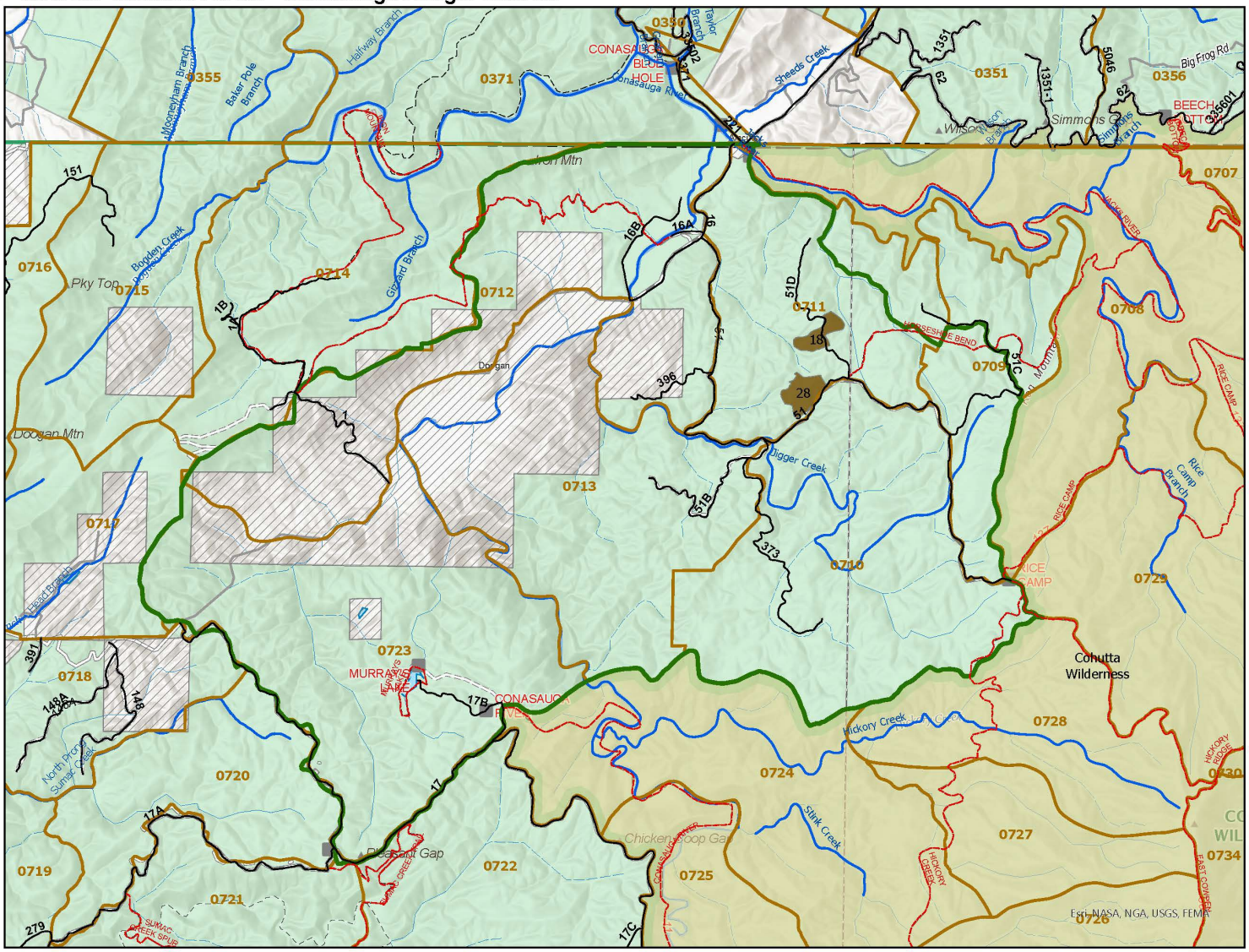
- There are more than 30,000 acres of fire-dependent, mid-late successional southern yellow pine forests that are highly departed from the open forest environment necessary for these species to maintain dominance through self-replacement.
- Shortleaf pine stands selected for treatment would be thinned to 40 – 60 ft^2/ac of basal area to establish a more open stand condition
- Herbicide treatments, mechanical mastication, and prescribed fire treatments would be used to reduce unwanted understory vegetation and promote pine seedling recruitment.
- Two stands

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/5/2024

Maintenance of Southern Yellow Pine Forest:
Commercial Thinning



Maintenance of oak forest: Commercial thinning **– 206 acres**

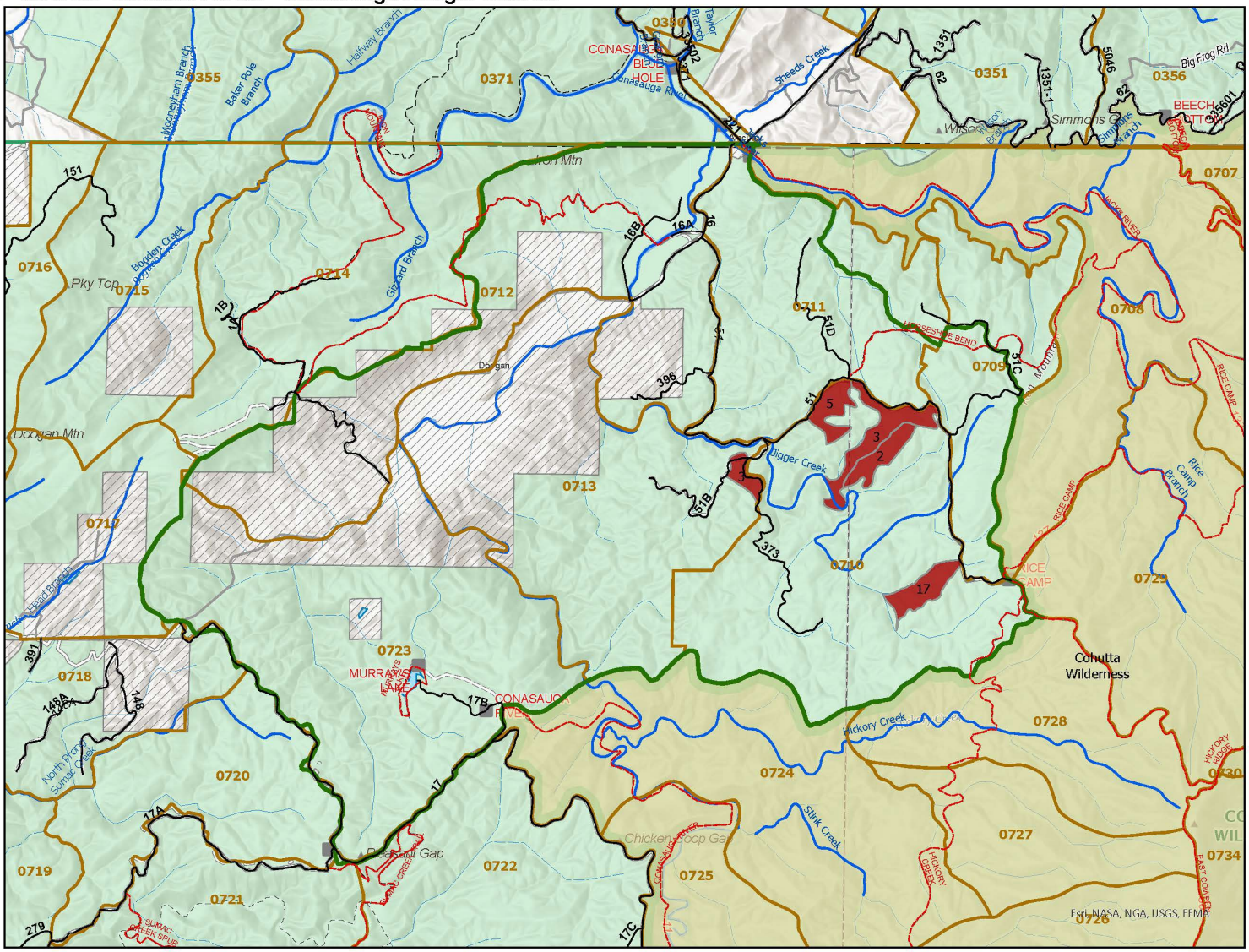
- A century of fire suppression has promoted the development of shade-tolerant, fire-sensitive species which are suppressing oak regeneration processes.
- Commercial thinning in combination with midstory reduction would be implemented to increase oak regeneration potential. Current oak regeneration potential is low in these stands (i.e., oak seedlings are small, infrequent, and/or are being outcompeted by shade-tolerant competitors in the understory).
- Thinning would reduce overstory trees to 40 – 60 ft^2/ac, favoring oaks, hickories, and shortleaf pine. Following the commercial thinning, the areas would be evaluated for subsequent needs for midstory reduction treatments designed to reduce oak seedling competitors
- Five stands

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/5/2024

Maintenance of Oak
Forest: Commercial Thinning



The USDA Forest Service makes no warranty, expressed or implied regarding the data displayed on this map, and reserves the right to correct, update, modify, or replace this information without notification.

Maintenance of oak forest: Expanding gap treatment **– 95 acres**

- Over 90% of oak forest is in late successional stage habitats. There are 0 acres of young oak (< 10 yrs. within the landscape). A general lack of disturbances in the oak forest community, including fire, has promoted the development of shade-tolerant, fire-sensitive species which are suppressing oak regeneration processes.

- In oak and oak-pine stands where fire cannot be used regularly, an expanding gap silvicultural method would be used to improve oak regeneration potential in mature oak stands.

- The expanding gap method is being proposed in collaboration with the Southern Research Station. Gaps would be created in the stands by removing overstory trees to create up to ½ acre openings. The surrounding stand would be thinned to a basal area of 50 – 70 ft^2/ac.

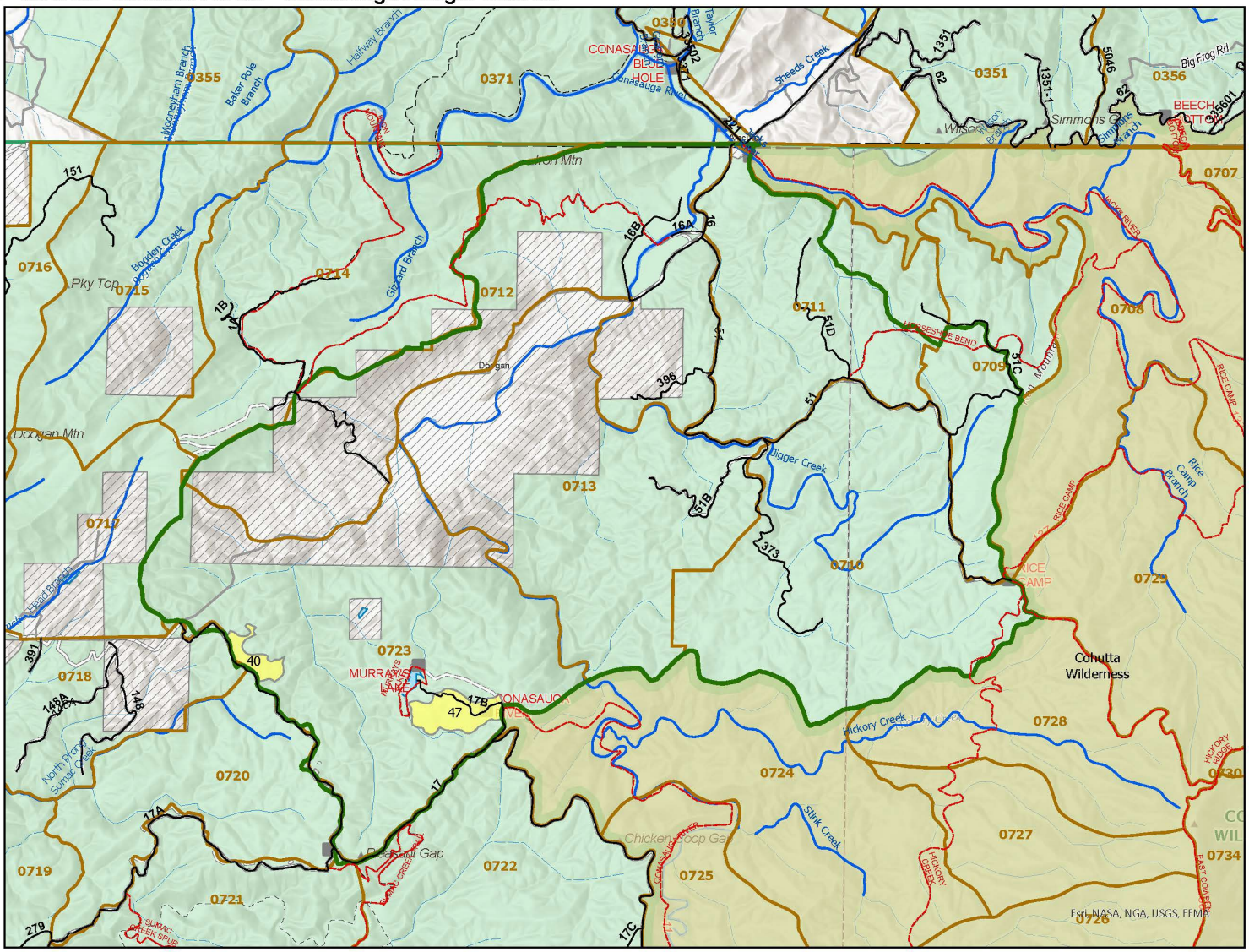
- Two stands

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/5/2024

Maintenance of Oak Forest: Expanding Gap Treatment

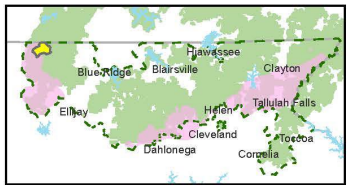


Legend

- Maintenance of Oak Forest - Expanding Gap
- Roads
- FS Trail
- Streams
- Upper Conasauga Project Boundary
- Compartments
- Non-FS Land
- Cohutta Wilderness Area

0 0.5 1 1.5 Miles

1:35,000



Canopy gap creation in closed-canopied mesic stands: Commercial thinning **– 34 acres**

- Canopy gap treatments will increase structural diversity beneficial for breeding migratory songbirds. Trees would be selectively removed from all crown positions (upper, mid and understory levels) and tree sizes, resulting in a patchy, irregular canopy.

- Gaps in the canopy would be small (up to ¾ acre) and implemented at relatively low intensities (less than 25% of the stand). Additional structural diversity would be obtained through intermediate thinning between gaps, retaining 70 – 80 ft^2/ac basal area in the thinned portion of the stand.

- Two stands

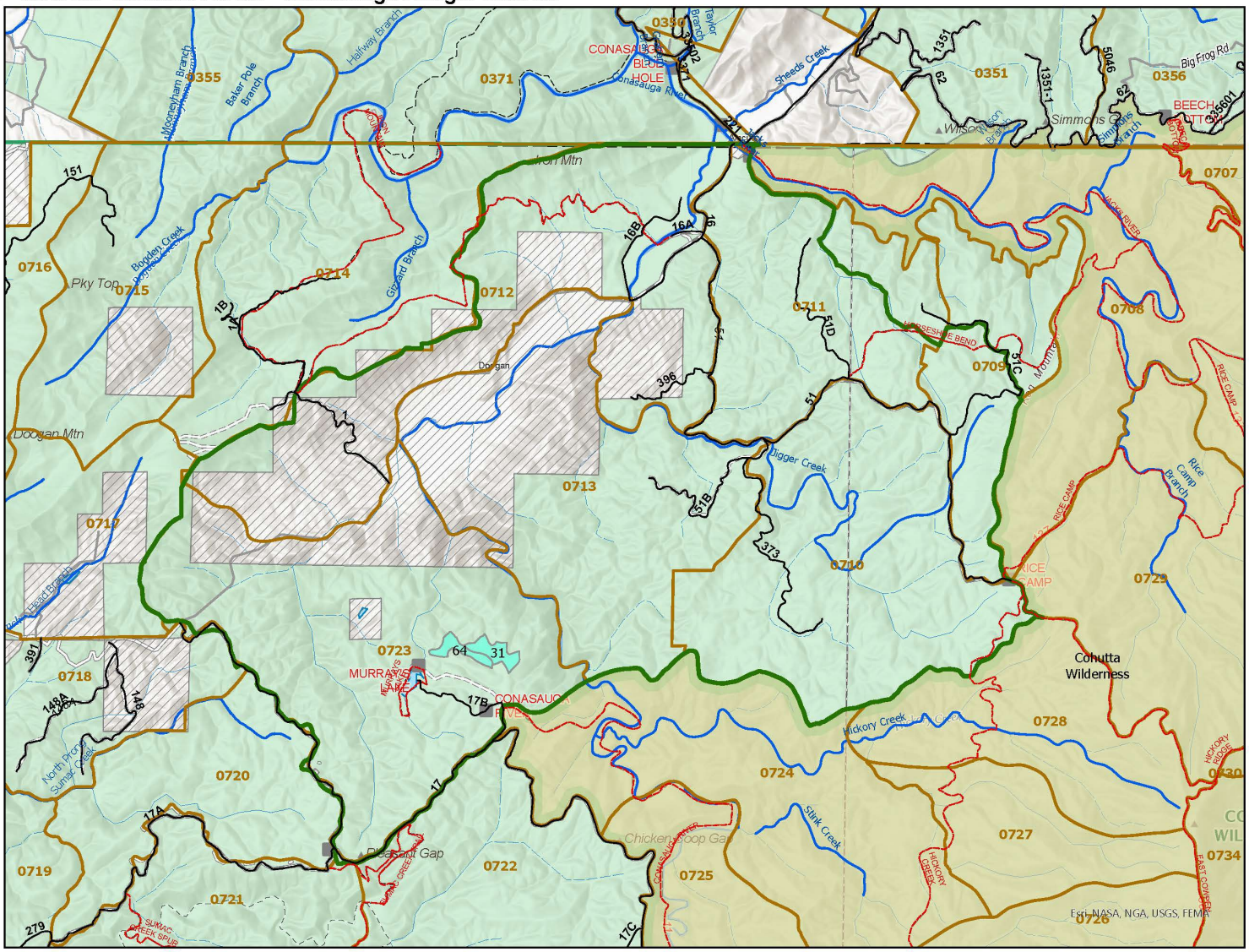
Cerulean warbler (*Setophaga cerulea*); Photo by Eric Soehren

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/5/2024

Canopy Gap Creation in Closed-canopied Mesic Stands: Commercial Thinning



The USDA Forest Service makes no warranty, expressed or implied regarding the data displayed on this map, and reserves the right to correct, update, modify, or replace this information without notification.

Restoring open woodland habitats on appropriate sites: 22 acres

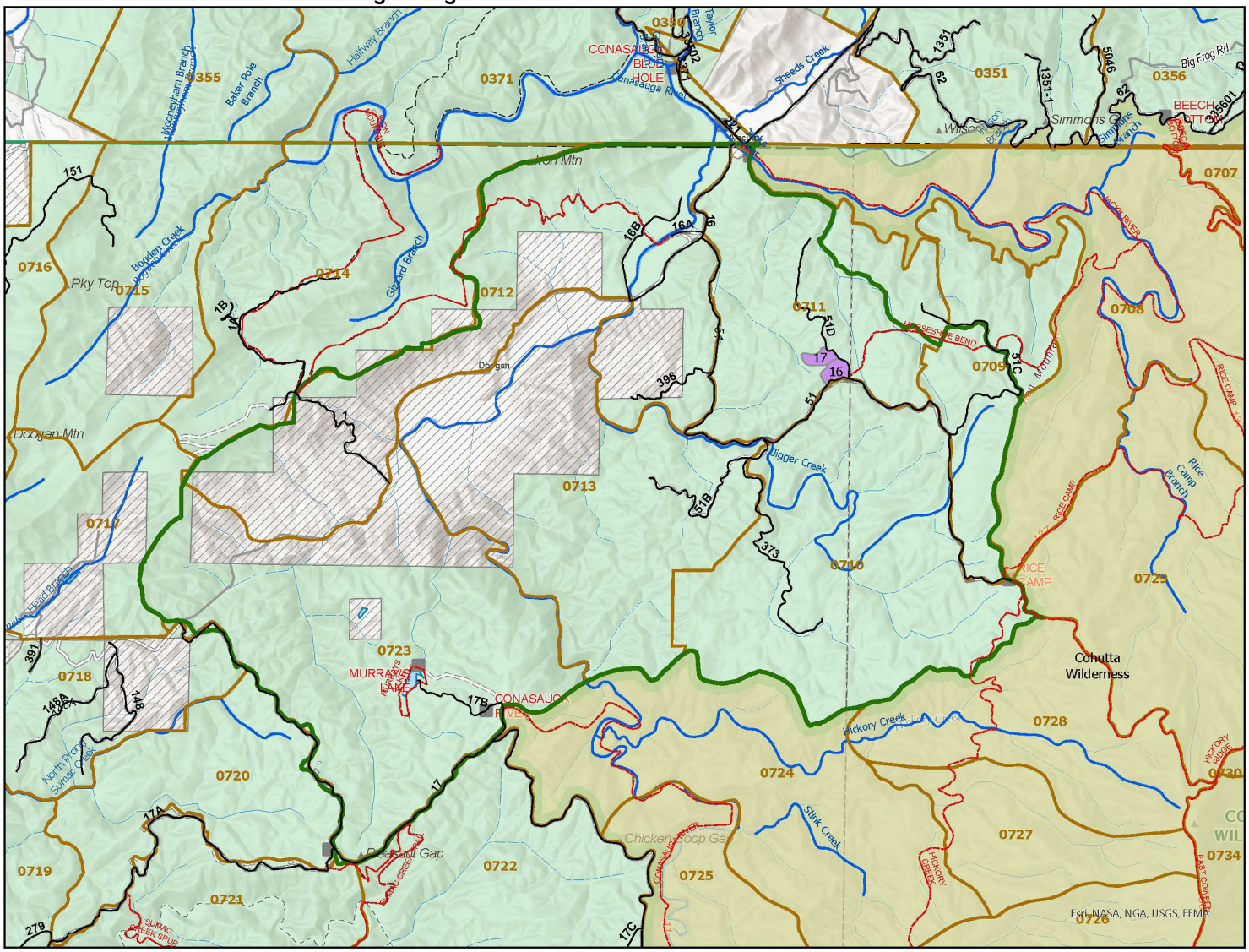
- Closed canopy and dense midstory suppresses regeneration and shades out herbaceous ground cover.
- These stands are adjacent to each other and fall within the existing East Cowpen Rx unit. Both sites exhibit woodland characteristics such as low site indices, long lived canopy trees, and herbaceous components in the understory.
- Open woodland blocks would likely require both partial overstory and midstory removal, with a residual basal area of 20 – 40 ft^2/ac, as well as continued prescribed burning to transition them to a desired open-habitat type.
- Two stands

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/5/2024

Restoring Open Woodland Habitats on Appropriate Sites: Commercial Thinning



The USDA Forest Service makes no warranty, expressed or implied regarding the data displayed on this map, and reserves the right to correct, update, modify, or replace this information without notification.

Create young forest (ESH) by daylighting roads and permanent openings:
24 acres road daylighting
10 acres of wildlife opening daylighting

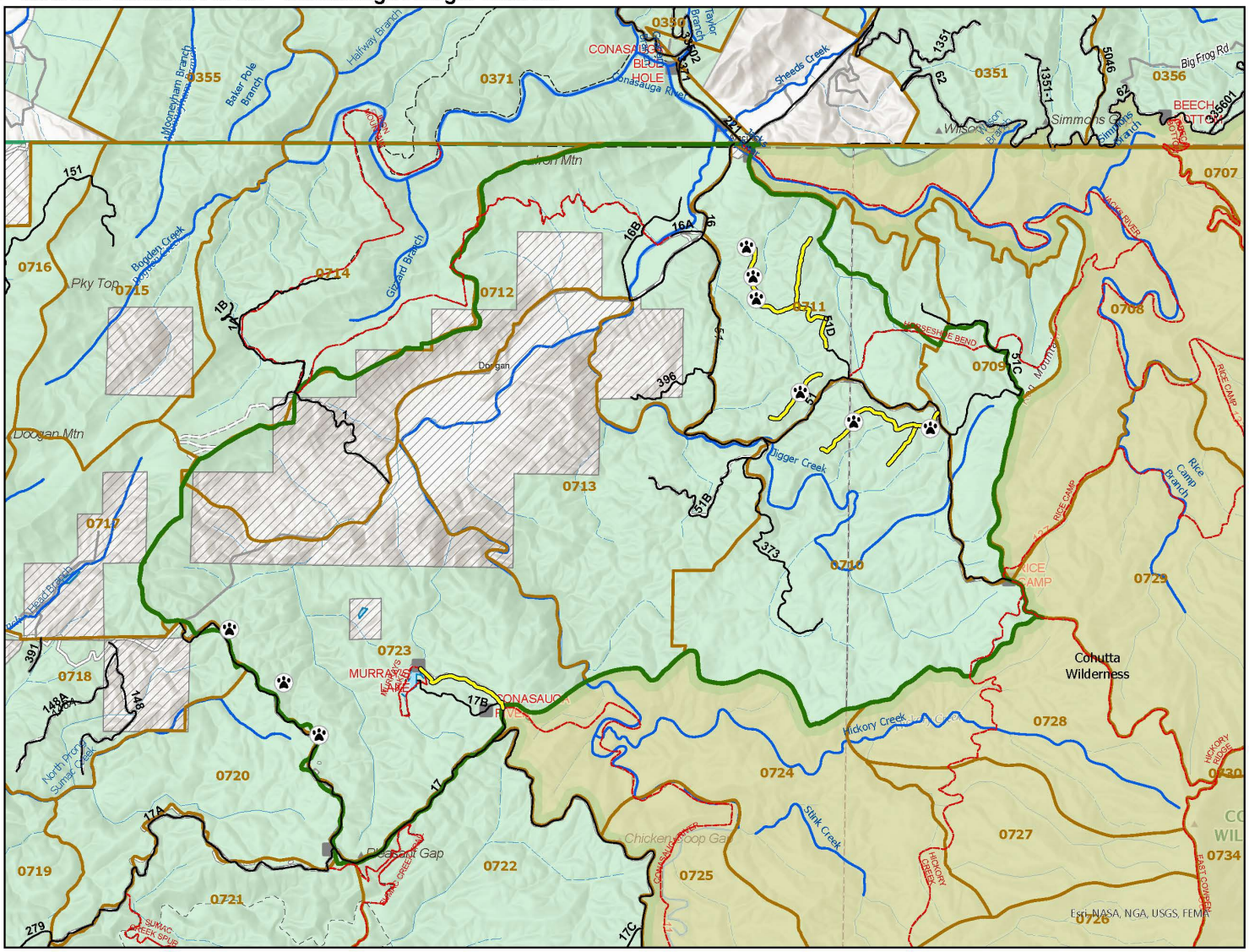
- Mid-late successional forest dominates the Foothills Landscape (99%) while valuable young forest habitat which is a benefit to wildlife is extremely limited (less than 1%).
- Daylighting removes the overstory tree canopy within an average of 25-feet from a road or other permanent opening to create young forest and improve road conditions by allowing sunlight to reach the road surface. This type of habitat benefits pollinators as well as many songbirds and other wildlife.
- A follow-up treatment to slash down non-commercial stems would be completed if needed.
- Four roads (3.9 miles) and 10 wildlife openings are proposed for this treatment.

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/23/2024

Create Young Forest (ESH) by Daylighting Roads and Permanent Openings



The USDA Forest Service makes no warranty, expressed or implied regarding the data displayed on this map, and reserves the right to correct, update, modify, or replace this information without notification.

Create or expand permanent openings – 10 acres

- Mid-late successional forest dominates the Foothills Landscape (99%) while valuable early-successional habitat, which is a benefit to wildlife, is extremely limited (less than 1%).

- Four wildlife openings in the project area are proposed for expansion. All are less than 0.6 acre and are within stands proposed for vegetation management, likely to be utilized as log landings.

- Expanded openings would range from 1 – 3 acres and be managed in a variety of ways: as grass/forb habitat, either as “food plots” (high-quality clover mixes) or native grasses and forbs, shrub habitat, or as pollinator habitat. The edges of the openings would be feathered into the adjacent forest stands for additional value as cover and a food source.

- Four openings

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/5/2024

Expand Permanent Openings

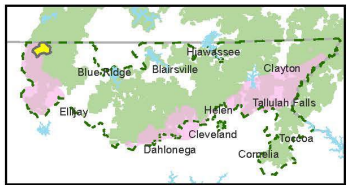
Legend

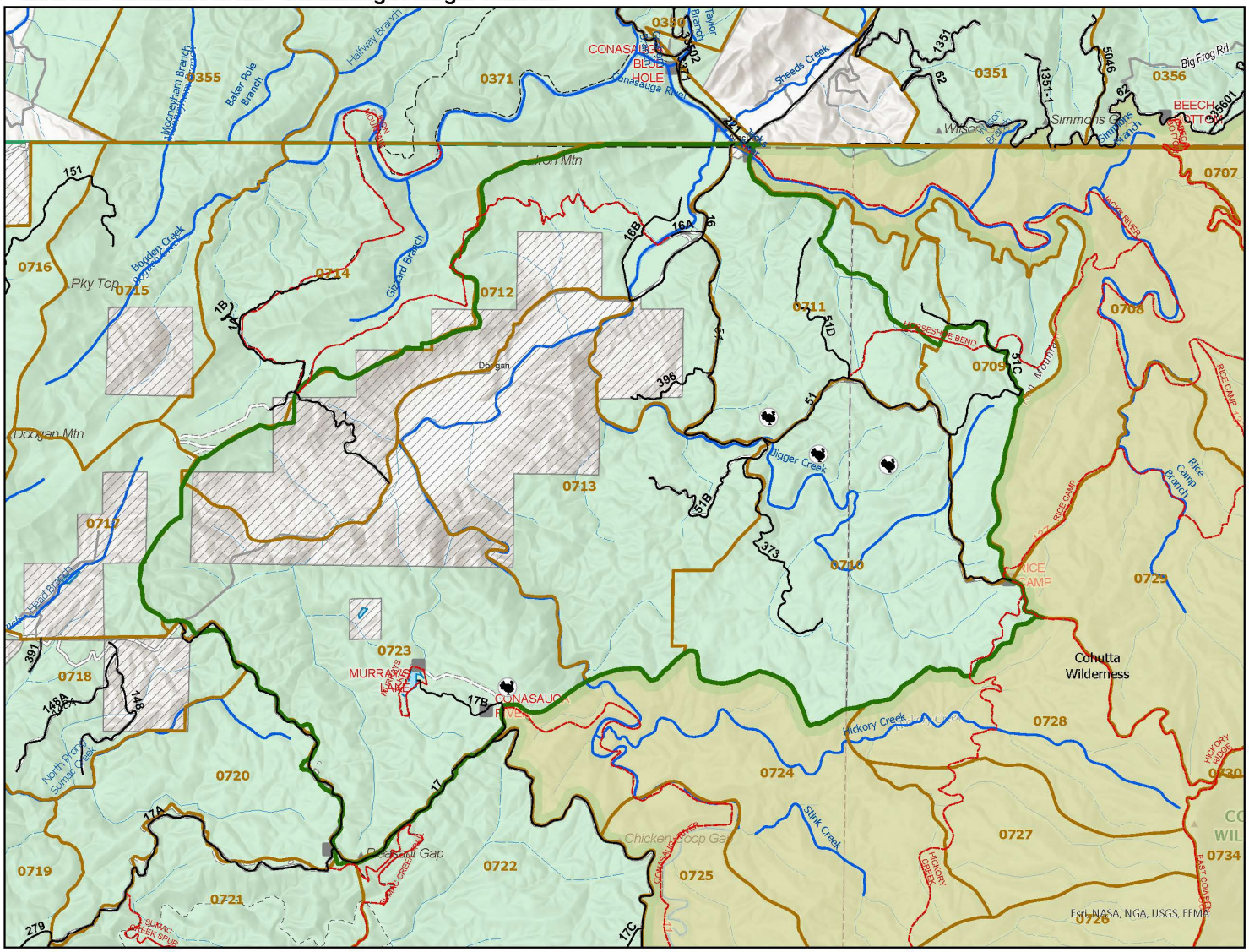
- Wildlife Opening Expansion
- Roads
- FS Trail
- Streams
- Upper Conasauga Project Boundary
- Compartments
- Non-FS Land
- Cohutta Wilderness Area

0 0.5 1 1.5 Miles

1:35,000

N W E S





Upper Conasauga IA Non-Commercial Actions

- Maintenance of oak forest: *midstory reduction* – **151 acres**
- Replacement of culverts, fords, or bridges to increase aquatic organism passage and function – **1 culvert removal**
- Prescribed fire in new burn blocks to facilitate restoration or maintenance of fire-adapted ecosystems or to reduce hazardous fuels – **1,530 acres**

Maintenance of oak forest: midstory reduction **– 151 acres**

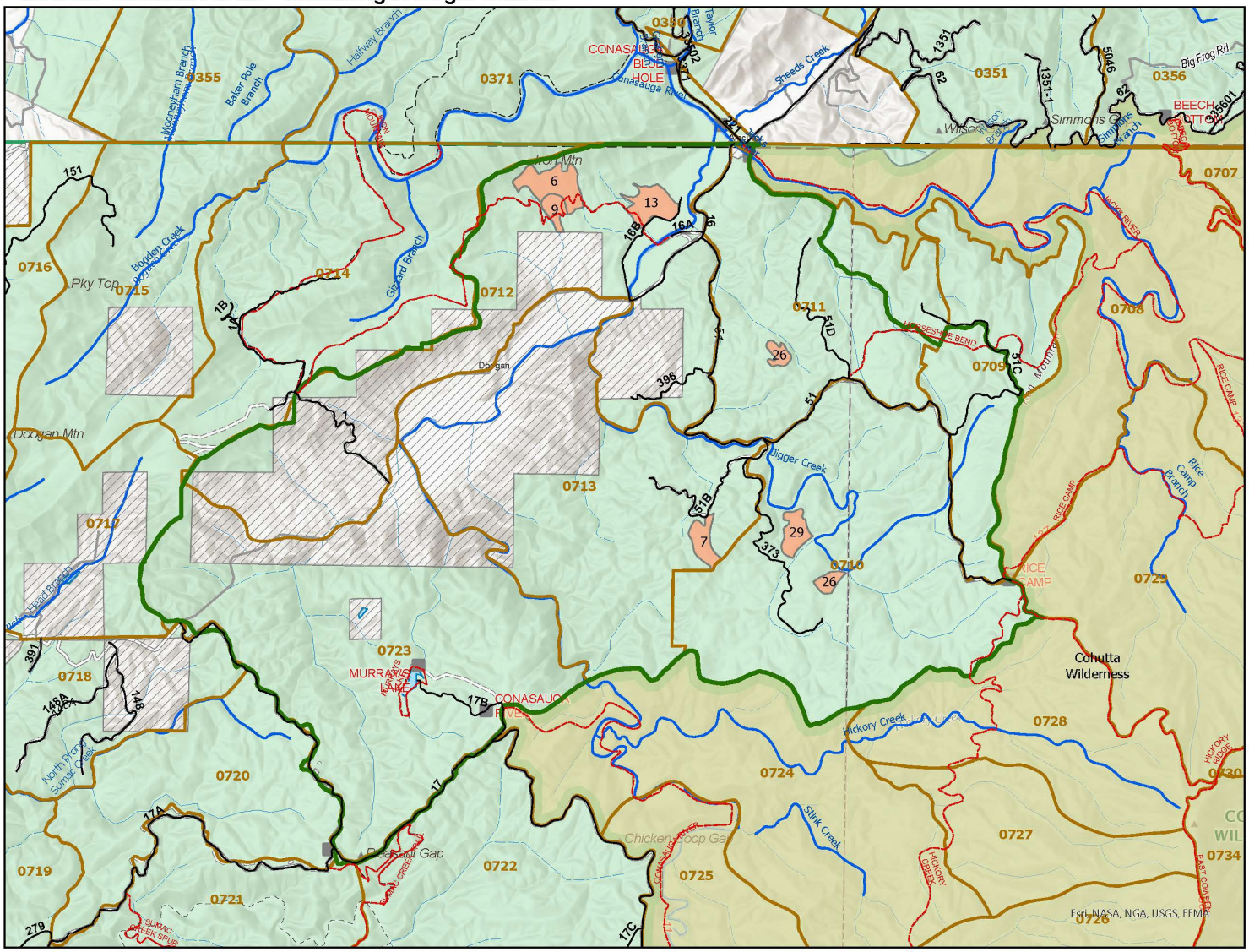
- The removal of fire as a recurring disturbance has promoted the development of shade-tolerant, fire-sensitive species which are suppressing oak regeneration processes.
- Oak midstory treatments are designed to alter the light environment on the forest floor to stimulate growth of oak seedlings while controlling oak competitors in the understory.
- Treatments would result in development of larger, more competitive oak seedlings, making these stands more likely to regenerate to oak in the event of a stand-replacing disturbance.
- Proposed treatment includes herbicide application to midstory vegetation ≤ 8” DBH. Roads and existing/proposed fire line locations will be buffered so as not to be affected by this treatment.
- Seven stands

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/5/2024

Maintenance of Oak Forest: Midstory Reduction



Replacement of culverts, fords, or bridges to increase aquatic organism passage and function – 1 culvert removal

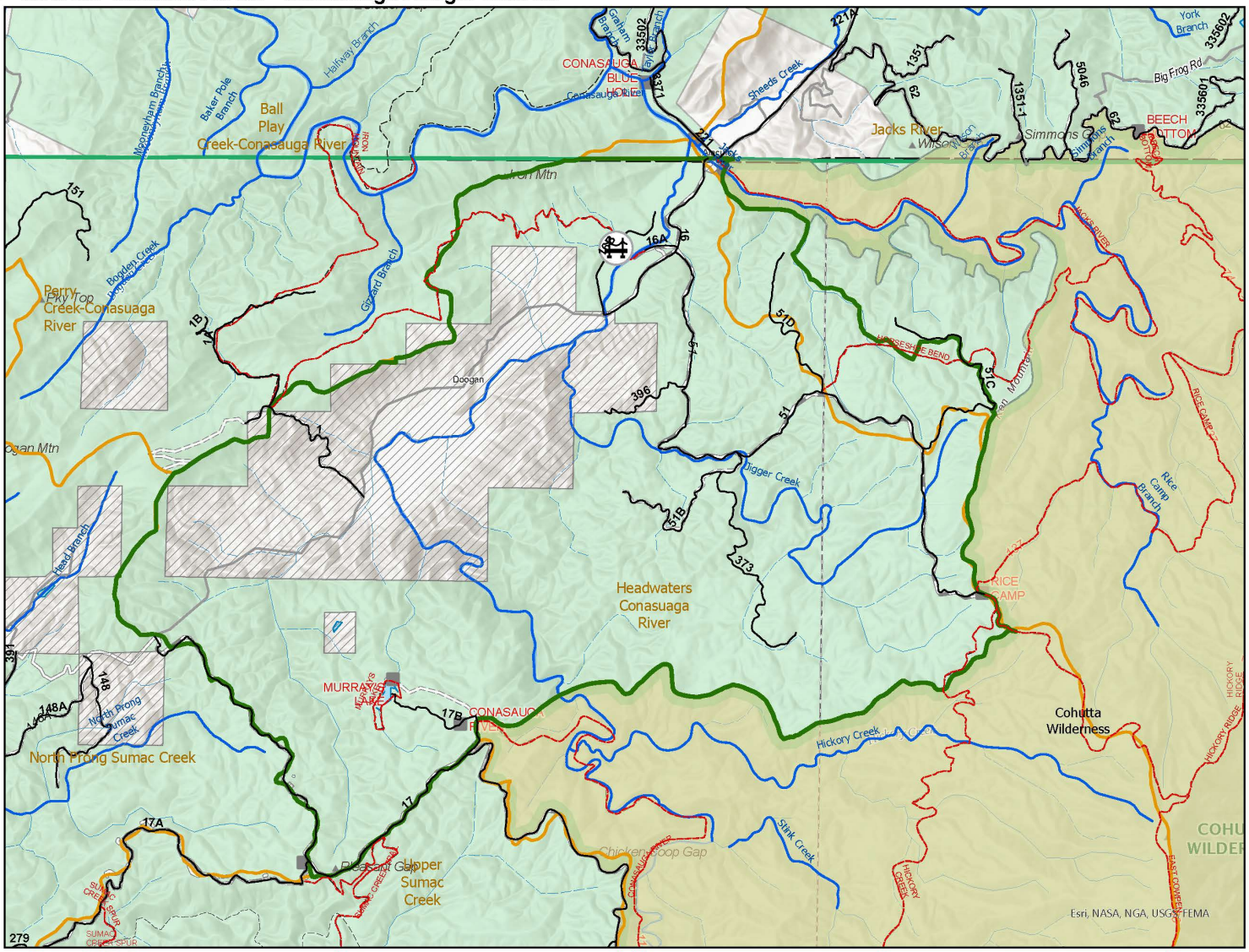
- A culvert on an unnamed tributary to the Conasauga River is restricting stream channel width and affecting aquatic organism passage (AOP). This culvert is on FSR 16B (Iron Mountain) and within 500 feet of the Conasauga River, which has numerous important, endemic fish and mussels.
- The proposal is to remove the culvert and install a low-water ford to restore stream flow and function.

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/5/2024

Replacement of Culverts, Fords, and Bridges to increase Aquatic Organism Passage

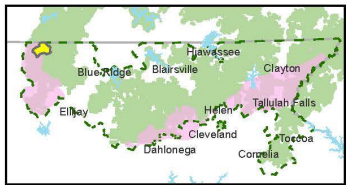


Legend

- Replacement of Culverts, Fords, or Bridges
- Roads
- FS Trail
- Streams
- Upper Conasauga Project Boundary
- Watersheds (6th-Level HUC)
- Non-FS Land
- Cohutta Wilderness Area

0 0.5 1 1.5 Miles

1:35,000



Prescribed fire in new burn blocks to facilitate restoration or maintenance of fire-adapted ecosystems or to reduce hazardous fuels – 1,530 acres

Three new prescribed burns are proposed in the project area:

- Buffalo Extension Rx– 213 acres
  - Extension the Buffalo Rx as a research burn in collaboration with the Southern Research Station (Prescribed Fire Lab).
- Gryder Camp Rx– 315 acres
  - This unit will generally be burned on a 3-5 year rotation and can vary between dormant and growing season.
- Burnt Schoolhouse Rx– 1,002 acres
  - A large portion of this unit was part of a prescribed burn unit back in the 1990's. This unit will generally be burned on a 3-5 year rotation and can vary between dormant and growing season.

Connected actions (for existing and proposed burns):

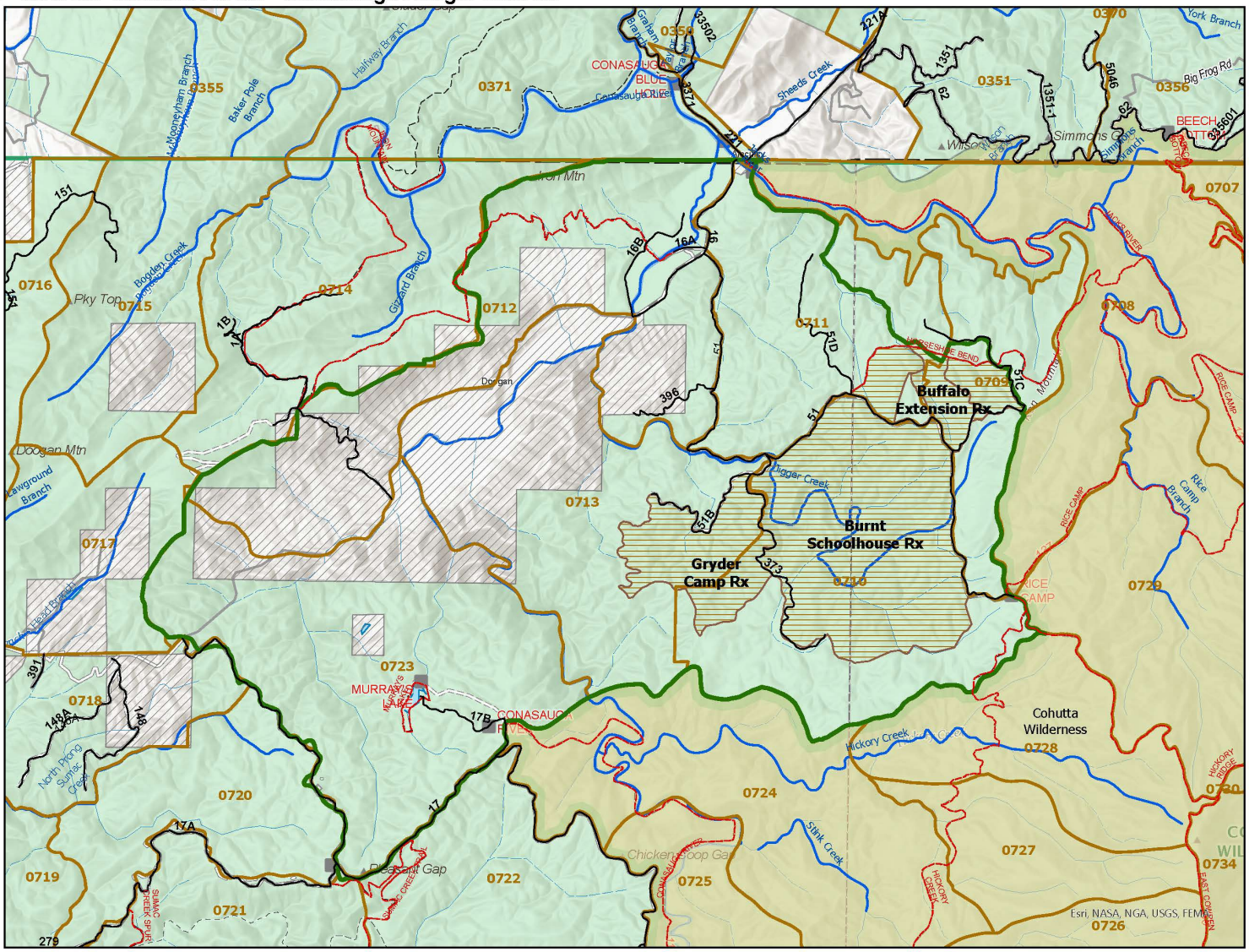
- Construction of 3.5 miles of new fire line. Most firelines will use existing roadbeds and features such as streambeds and creeks. New firelines would be bladed with a dozer to create a fuel break or leaf litter would be blown with a blower. In riparian areas, line construction is limited to hand tools and blowers.

Upper Conasauga Implementation Area - Foothills Landscape Project

Chattahoochee - Oconee National Forest - Conasauga Ranger District

Map Creation Date: 9/5/2024

Prescribed Fire in New Burn Blocks to facilitate Restoration or Maintenance of Fire-adapted Ecosystems or to reduce Hazardous Fuels

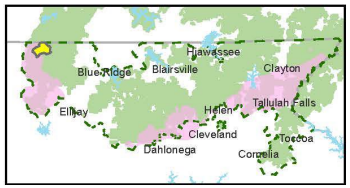


Legend

- New Burn Blocks
- Roads
- FS Trail
- Streams
- Upper Conasauga Project Boundary
- Compartments
- Non-FS Land
- Cohutta Wilderness Area

0 0.5 1 1.5 Miles

1:35,000



Next Steps:

- Step 4: Present draft implantation plan to stakeholders (engage with Foothills Collaborative Group)
- Step 5: Public notice and opportunity for input
- Step 6: Conduct field trip (**November 14th**)
- Step 7: Identify additional monitoring needs
- Step 8: Finalize implantation plan
- Step 9: Submit for District Ranger approval
- Step 10: Conduct contract review

USDA Forest Service
U.S. DEPARTMENT OF AGRICULTURE

Chattahoochee-Oconee National Forest | Conasauga Ranger District | October 2024

Upper Conasauga Public Field Trip Sign Up:

Submit this form if you would like to join the public field trip on November 14th.

Upper Conasauga Public Comments:

Submit this form to provide comments or feedback on the UCON Implementation Plan.

These surveys can also be found on the FS Foothills Landscape Project website.

Thank you for your engagement with this process!

Foothills Landscape Project: Upper Conasauga Public Field Trip

Foothills Landscape Project: Upper Conasauga Public Comments